

CLEAN COPY OF AMENDMENTS

In the Claims:

Please Cancel claim 2.

Please amend the claims as follows:

1. (Twice Amended) A medical device for treating a portion of the body of a living organism, comprising, at least one layer of conductive material,

wherein the conductive material comprises a resistance less than about 1000 ohms/cm²;

wherein the conductive material is at least partially composed of a biologically inert polymer which is at least partially coated with a metal or a metal alloy; and

wherein no external energy source or galvanic cell action is required to alter an electrodynamic process of a portion of the body of a living organism.

4. The medical device of Claim 1, wherein the metal is selected from the group consisting of silver, gold, aluminum, nickel, tin, stainless steel, copper, and combinations thereof, and the metal alloy is selected from the group consisting of aluminum-copper, aluminum-magnesium, copper-gold, copper-nickel, copper-palladium, gold-palladium, gold-silver, iron-nickel and silver-palladium, and combinations thereof

15. A medical device, comprising, a wound dressing incorporated into an appliance;

wherein the wound dressing comprises more than two layers of a fibrous material;

wherein the material contains nonmetalized fibers and fibers that are at least partially coated with a metallic material to yield metalized fibers, each layer being joined to an adjacent layer and having a ratio of metalized fibers to nonmetalized fibers; and

wherein the layers form a gradient of metalized fiber to nonmetalized fiber ratios, the highest ratio layer capable of being placed in contact with a wound site.

19. (Twice Amended) A method for treating a portion of the body of a living organism, comprising,

a) applying a medical device to a portion of the body of a living organism, wherein the medical device comprises at least one layer of conductive material;

wherein the conductive material comprises a resistance less than about 1000 ohms/cm²;

wherein the conductive material is at least partially composed of a biologically inert polymer which is at least partially coated with a metal or metal alloy; and

wherein no external energy source or galvanic cell action is required to alter an electrodynamic process of a portion of the body of a living organism;

b) altering the electric parameters of the portion of the body without using an external energy source or galvanic cell action; and

c) lowering the electrical resistance and increasing the current of the portion of the body.